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SEQUENCE LISTING

<110> University of Kentucky Research Foundation
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JI, Inhae

<120> GENES AND AGENTS TO REGULATE FOLLICULAR DEVELOPMENT, OVULATION CYCLE AND STERIODOGENESIS

<130> 050229-0424

<140> 10/736,892
<141> 2003-12-17

<150> 60/437,729
<151> 2003-01-03

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<170> PatentIn version 3.3

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<213> Rattus norvegicus

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gtcccgacgg aggggtcatg caaccggtgc gcaccgtggt gcctgtggcc aagcaccgag 180

gcttcttggg agtcatgcca gcctacagtg ccgctgagga tgcactcacc accaagttag 240

tcaccttcta tgagggccac agcaacaatg ctgtcccctc ccaccaggca tcagtgcttc 300

tctttgatcc cagcaatggt tccctgctgg cggtcatgga tggaaatgtc ataactgcaa 360

agaggacagc agccgtctct gccatcgcca ccaagttttt gaagccccca ggcagtgatg 420

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tcatgtttgt ggttggata 1099

<210> 8
<211> 313
<212> PRT
<213> Rattus norvegicus

<400> 8

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20 25 30

Asn Phe Ser Lys Gly Pro Asp Gly Gly Val Met Gln Pro Val Arg Thr
35 40 45

Val Val Pro Val Ala Lys His Arg Gly Phe Leu Gly Val Met Pro Ala
50 55 60

Tyr Ser Ala Ala Glu Asp Ala Leu Thr Thr Lys Leu Val Thr Phe Tyr
65 70 75 80

Glu Gly His Ser Asn Asn Ala Val Pro Ser His Gln Ala Ser Val Leu
85 90 95

Leu Phe Asp Pro Ser Asn Gly Ser Leu Leu Ala Val Met Asp Gly Asn
100 105 110

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Val Ile Thr Ala Lys Arg Thr Ala Ala Val Ser Ala Ile Ala Thr Lys
        115                 120                 125

Phe Leu Lys Pro Pro Gly Ser Asp Val Leu Cys Ile Leu Gly Ala Gly
    130                 135                 140

Val Gln Ala Tyr Ser His Tyr Glu Ile Phe Thr Glu Gln Phe Ser Phe
145                 150                 155                 160

Lys Glu Val Arg Met Trp Asn Arg Thr Arg Glu Asn Ala Glu Lys Phe
                165                 170                 175

Ala Ser Ser Val Gln Gly Asp Val Arg Val Cys Ser Ser Val Gln Glu
            180                 185                 190

Ala Val Thr Gly Ala Asp Val Ile Ile Thr Val Thr Met Ala Thr Glu
        195                 200                 205

Pro Ile Leu Phe Gly Glu Trp Val Lys Pro Gly Ala His Ile Asn Ala
    210                 215                 220

Val Gly Ala Ser Arg Pro Asp Trp Arg Glu Leu Asp Asp Glu Leu Met
225                 230                 235                 240

Lys Gln Ala Val Leu Tyr Val Asp Ser Arg Glu Ala Ala Leu Lys Glu
                245                 250                 255

Ser Gly Asp Val Leu Leu Ser Gly Ala Asp Ile Phe Ala Glu Leu Gly
            260                 265                 270

Glu Val Val Ser Gly Ala Lys Pro Ala Tyr Cys Glu Lys Thr Thr Val
        275                 280                 285

Phe Lys Ser Leu Gly Met Ala Val Glu Asp Leu Val Ala Ala Lys Leu
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Val Tyr Asp Ser Trp Ser Ser Gly Lys
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<213> Mus musculus

<400> 9

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Asn Phe Ser Lys Gly Pro Asp Gly Gly Val Met Gln Pro Val Arg Thr
        35                  40                  45

Val Val Pro Val Ala Lys His Arg Gly Phe Leu Gly Val Met Pro Ala
    50                  55                  60

Tyr Ser Ala Ala Glu Asp Ala Leu Thr Thr Lys Leu Val Thr Phe Tyr
65                  70                  75                  80

Glu Gly His Ser Asn Thr Ala Val Pro Ser His Gln Ala Ser Val Leu
                85                  90                  95

Leu Phe Asp Pro Ser Asn Gly Ser Leu Leu Ala Val Met Asp Gly Asn
            100                 105                 110

Val Ile Thr Ala Lys Arg Thr Ala Ala Val Ser Ala Ile Ala Thr Lys
        115                 120                 125

Leu Leu Lys Pro Pro Gly Ser Asp Val Leu Cys Ile Leu Gly Ala Gly
    130                 135                 140

Val Gln Ala Tyr Ser His Tyr Glu Ile Phe Thr Glu Gln Phe Ser Phe
145                 150                 155                 160

Lys Glu Val Arg Met Trp Asn Arg Thr Arg Glu Asn Ala Glu Lys Phe
                165                 170                 175

Ala Ser Thr Val Gln Gly Asp Val Arg Val Cys Ser Ser Val Gln Glu
            180                 185                 190

Ala Val Thr Gly Ala Asp Val Ile Ile Thr Val Thr Met Ala Thr Glu
        195                 200                 205

Pro Ile Leu Phe Gly Glu Trp Val Lys Pro Gly Ala His Ile Asn Ala
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210 215 220

Val Gly Ala Ser Arg Pro Asp Trp Arg Glu Leu Asp Asp Glu Leu Met
225 230 235 240

Arg Gln Ala Val Leu Tyr Val Asp Ser Arg Glu Ala Ala Leu Lys Glu
245 250 255

Ser Gly Asp Val Leu Leu Ser Gly Ala Asp Ile Phe Ala Glu Leu Gly
260 265 270

Glu Val Ile Ser Gly Ala Lys Pro Ala His Cys Glu Lys Thr Thr Val
275 280 285

Phe Lys Ser Leu Gly Met Ala Val Glu Asp Leu Val Ala Ala Lys Leu
290 295 300

Val Tyr Asp Ser Trp Ser Ser Gly Lys
305 310

<210> 10
<211> 314
<212> PRT
<213> Homo sapiens

<400> 10

Met Ser Arg Val Pro Ala Phe Leu Ser Ala Ala Glu Glu Glu Asp His
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Leu Arg Ser Ser Ser Leu Leu Ile Pro Pro Leu Glu Thr Ala Leu Ala
20 25 30

Asn Phe Ser Ser Gly Glu Asp Gly Gly Val Met Gln Pro Val Arg Thr
35 40 45

Val Val Pro Val Thr Lys His Arg Gly Tyr Leu Gly Val Met Pro Ala
50 55 60

Tyr Ser Ala Ala Glu Asp Ala Leu Thr Thr Lys Leu Val Thr Phe Tyr
65 70 75 80

Glu Asp Arg Gly Ile Thr Ser Val Val Pro Ser His Gln Ala Thr Val
85 90 95

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Leu Leu Phe Glu Pro Ser Asn Gly Thr Leu Leu Ala Val Met Asp Gly
            100                 105                 110

Asn Val Ile Thr Ala Lys Arg Thr Ala Ala Val Ser Ala Ile Ala Thr
        115                 120                 125

Lys Phe Leu Lys Pro Pro Ser Ser Glu Val Leu Cys Ile Leu Gly Ala
    130                 135                 140

Gly Val Gln Ala Tyr Ser His Tyr Glu Ile Phe Thr Glu Gln Phe Ser
145                 150                 155                 160

Phe Lys Glu Val Arg Ile Trp Asn Arg Thr Lys Glu Asn Ala Glu Lys
                165                 170                 175

Phe Ala Asp Thr Val Gln Gly Glu Val Arg Val Cys Ser Ser Val Gln
            180                 185                 190

Glu Ala Val Ala Gly Ala Asp Val Ile Ile Thr Val Thr Leu Ala Thr
        195                 200                 205

Glu Pro Ile Leu Phe Gly Glu Trp Val Lys Pro Gly Ala His Ile Asn
    210                 215                 220

Ala Val Gly Ala Ser Arg Pro Asp Trp Arg Glu Leu Asp Asp Glu Leu
225                 230                 235                 240

Met Glu Gln Ala Val Leu Tyr Val Asp Ser Gln Glu Ala Ala Leu Lys
                245                 250                 255

Glu Ser Gly Asp Val Leu Leu Ser Gly Ala Glu Ile Phe Ala Glu Leu
            260                 265                 270

Gly Glu Val Ile Lys Gly Val Lys Pro Ala His Cys Glu Lys Thr Thr
        275                 280                 285

Val Phe Lys Ser Leu Gly Met Ala Val Glu Asp Thr Val Ala Ala Lys
    290                 295                 300

Leu Ile Tyr Asp Ser Trp Ser Ser Gly Lys
305                 310
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<213> Rattus norvegicus

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aactgtcaac ataggttcga tcagtacagc ggatggctct gctctagtga agctggggaa 180

caccacagtc atttgtggag ttaaagcaga atttgcagca ccaccagtag atgcccctga 240

tagaggatat gtcgtcccta atgtggacct accaccgctg tgttcatcga ggtttcggac 300

tggacctcct ggagaagagg ctcaagtaac cagccagttc attgcagatg tcattgagaa 360

ctcacacata attaagaaag aggacttatg catttctcca gggaagcttg cttgggttct 420

atactgtgac cttatttgcc tagactacga tgggaacatt ttggatgcct gcacatttgc 480

tttgttagca gctttaaaga atgtacagtt gcctgaagtt actataaatg aagaaactgc 540

tttagcggaa gtcaatttaa agaagaaaag ttatttgaat gttagagcaa acccagttgc 600

tacttcattt gctgtgtttg atgacacttt gctgatagtc gatcctaccg gggaggaggg 660

gcaccctgtc cacaggaacc ttaaccgtag taatggacga ggaaggcaag ctgtgctgtc 720

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<212> PRT
<213> Rattus norvegicus

<400> 12

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Phe Leu Lys Glu Asn Cys Arg Pro Asp Gly Arg Glu Leu Gly Glu Phe
20 25 30

Arg Thr Thr Thr Val Asn Ile Gly Ser Ile Ser Thr Ala Asp Gly Ser

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          35                  40                  45

Ala Leu Val Lys Leu Gly Asn Thr Thr Val Ile Cys Gly Val Lys Ala
    50                  55                  60

Glu Phe Ala Ala Pro Pro Val Asp Ala Pro Asp Arg Gly Tyr Val Val
65                  70                  75                  80

Pro Asn Val Asp Leu Pro Pro Leu Cys Ser Ser Arg Phe Arg Thr Gly
                85                  90                  95

Pro Pro Gly Glu Glu Ala Gln Val Thr Ser Gln Phe Ile Ala Asp Val
            100                 105                 110

Ile Glu Asn Ser His Ile Ile Lys Lys Glu Asp Leu Cys Ile Ser Pro
        115                 120                 125

Gly Lys Leu Ala Trp Val Leu Tyr Cys Asp Leu Ile Cys Leu Asp Tyr
    130                 135                 140

Asp Gly Asn Ile Leu Asp Ala Cys Thr Phe Ala Leu Leu Ala Ala Leu
145                 150                 155                 160

Lys Asn Val Gln Leu Pro Glu Val Thr Ile Asn Glu Glu Thr Ala Leu
                165                 170                 175

Ala Glu Val Asn Leu Lys Lys Lys Ser Tyr Leu Asn Val Arg Ala Asn
            180                 185                 190

Pro Val Ala Thr Ser Phe Ala Val Phe Asp Asp Thr Leu Leu Ile Val
        195                 200                 205

Asp Pro Thr Gly Glu Glu Gly His Pro Val His Arg Asn Leu Asn Arg
    210                 215                 220

Ser Asn Gly Arg Gly Arg Gln Ala Val Leu Ser Ser Gln Ala Arg Trp
225                 230                 235                 240

Glu Trp Ala Ala Gly Ala Lys Leu Gln Asp Cys Met Ser Arg Ala Val
                245                 250                 255

Thr Arg His Lys Glu Val Ser Lys Leu Leu Asp Glu Val Ile Gln Ser
            260                 265                 270
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Met Lys His Lys
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tcgatcagta cagcggatgg ctctgctcta gtgaagctgg ggaacaccac agtcatttgt 180

ggagttaaag cagaatttgc agcaccacca gtagatgccc ctgatagagg atatgtcgtc 240

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aaagaggact tatgcatttc tccagggaag cttgcttggg ttctatactg tgaccttatt 420

tgcctagact acgatgggaa cattttggat gcctgcacat ttgctttgtt agcagcttta 480

aagaatgtac agttgcctga agttactata aatgaagaaa ctgctttagc ggaagtcaat 540

ttaaagaaga aaagttattt gaatgttaga gcaaacccag ttgctacttc atttgctgtg 600

tttgatgaca ctttgctgat agtcgatcct accggggagg aggggcaccc tgtccacagg 660

aaccttaacc gtagtaatgg acgaggaagg caagctgtgc tgtcttcaca agccaggtgg 720

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gaagtgagca aactactgga tgaagtaatt cagagcatga aacacaaa 828